## **CLAIMS**

1) Apparatus for loading vessels such as reactors, silos and similar ones with solid particles is characterized by the inclusion within a vertical body (1) a supplying device made up of a number of bell shaped enlarged tubes towards the bottom(2), co-axially arranged one within the other and a propulsion device (4), made up of gas jets (7) located at same level and in front of the bell shaped openings tubes (2) and facing the outside; and a distribution device made up of a number of rotating plates (3), rotating around the axis of the apparatus each of which is under the bell shaped opening tubes.

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- 2) Apparatus according to claim 1, in which there are in addition straight pipes (6) and that can slide vertically independently, around the bell shaped tubes.
- 3) Apparatus according to claim 1, in which the distribution plates are each constituted of a ring specially fitted with brushes (30) or soft and flexible bristles.
- 4) Apparatus according to claims 1 and 3 in which the brushes or brushes' bristles (30) have varying radial dimensions in accordance with their position on the periphery.

5) Apparatus according to claim 1 in which the force of the blowing can be adjusted by regulating the gas pressure in the circular pipe.

6) Apparatus according to claim 1 in which the gas jets of propulsion device can be partially sealed and modulated by perforated rings (5) that are fixed on the rotating plates (3) of the distribution device.

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7) Apparatus according to claim 1 is in which the vertical direction of the gas jets (7), of the propulsion device vary in accordance with their position along the gas circuit from which they get their gas feed.

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8) Apparatus according to claim 1 in which the gas jets (7) of the propulsion device get their gas feed from ring like chamber formed around and within the bell shaped openings of the feeding device (M).

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9) Apparatus according to claim 1 in which the propulsion of the gas jets (7) are brought together to form a laminar jet originating from an opening along the gas circuit.

10) Apparatus according to claim 1 including a corrector (9, 16, 11, 12, 13 & 14) that consists of a feeding, propulsion, and of distribution situated before the main body of the machine and that is limited to a given area of the periphery.